

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for reducing boundary effects in for-images with mixed screen patterns, comprising: the steps of:

halftoning an image an original contone image, resulting in a halftone image with a plurality of halftone portions; and

adjusting boundary regions located between halftone portions of the halftone image of said image to minimize a brightness deviation between the boundary regions and the original contone image. of from an.

2. (Currently Amended) The method according to Claim 1 for reducing boundary effects in for-images, wherein adjusting boundary regions a boundary region further comprises: the steps of:

performing a low-pass filtering of in halftones in said the boundary regions, a boundary region having a width that is which have one or more than one pixels wide, along a boundary.

3. (Currently Amended) The method according to Claim 2 for reducing boundary effects for in images, wherein low-pass filtering further comprises: the steps of:

choosing a cutoff frequency for said the low-pass filtering.

4. (Currently Amended) The method according to Claim 2 for reducing boundary effects for in images, wherein low-pass filtering further comprises: the steps of:

choosing a cutoff frequency for said the low-pass filtering that is substantially the halftone frequency. to be around halftone frequency

5. (Currently Amended) The method according to Claim 2 for reducing boundary effects ~~for-in~~ images, wherein adjusting boundary regions adjustment further comprises: the steps of:

comparing a filtered portion of the halftone image to a corresponding portion of the original contone image ~~said filtering result to said original contone image~~ and generating an error map.

6. (Currently Amended) The method according to Claim 2 for reducing boundary effects ~~for-in~~ images, wherein adjusting boundary regions adjustment further comprises: the steps of:

comparing a filtered portion of the halftone image to a corresponding portion of the original contone image to generate an error map that includes an error at a pixel (m,n). ~~said filtering result to said original contone image and at pixel (m,n) generating an error map.~~

7. (Currently Amended) The method according to Claim 6 ~~Claim 5~~ for reducing boundary effects ~~for-in~~ images, further comprising:

adjusting pixels in the said pixels in said boundary regions to reduce a magnitude of errors ~~errors stored in the error map that correspond to the pixels.~~

8. (Currently Amended) The method according to Claim 6 ~~Claim 3~~ for reducing boundary effects ~~for-in~~ images, further comprising:

adjusting sequentially the pixels in the said pixels in said boundary regions to reduce a magnitude of the errors ~~stored in the error map that correspond to the pixels.~~

9. (Currently Amended) The method according to Claim 6 ~~Claim 3~~ for reducing boundary effects ~~for-in~~ images, further comprising:

adjusting said-the pixels in the boundary regions by first adjusting pixels with errors larger than the errors associated with other pixels in the boundary regions ~~by staring~~

~~from pixels with larger errors to ones with smaller errors in said boundary regions to reduce a magnitude of the errors stored in the error map that correspond to the pixels with larger errors. magnitude of the errors.~~

10. (Currently Amended) A method for reducing boundary effects ~~for in~~ images with mixed screen patterns, comprising: ~~the steps of:~~

~~halftoning an image an original contone image, resulting in a halftone image with a plurality of halftone portions;~~

~~adjusting a boundary region boundary regions located between halftone portions of the halftone image of said image to minimize a brightness deviation between the boundary regions and the original contone image; of said halftone from an original contone; and~~

~~performing a low-pass filtering in of halftones in the boundary regions, a boundary region having a width that is one or more pixels wide. which have one or more than one pixels wide along a boundary.~~

11. (Currently Amended) The method according to Claim 10 for reducing boundary effects ~~for in~~ images, wherein low-pass filtering further comprises: ~~the steps of:~~

~~choosing a cutoff frequency for said the low-pass filtering.~~

12. (Currently Amended) The method according to Claim 10 Claim 11 for reducing boundary effects ~~for in~~ images, wherein low-pass filtering further comprises: ~~the steps of:~~

choosing a cutoff frequency for ~~said the~~ low-pass filtering ~~that is substantially the halftone frequency. to be around halftone frequency~~

13. (Currently Amended) The method according to Claim 10 for reducing boundary effects ~~for in~~ images, wherein adjusting boundary regions adjustment further comprises: ~~the steps of:~~

comparing a filtered portion of the halftone image to a corresponding portion of the original contone image ~~said filtering result to said original contone image~~ and generating an error map.

14. (Currently Amended) The method according to Claim 10 for reducing boundary effects ~~for in~~ images, wherein adjusting boundary regions adjustment further comprises: ~~the steps of:~~

comparing a filtered portion of the halftone image to a corresponding portion of the original contone image to generate an error map that includes an error at a pixel (m,n). ~~said filtering result to said original contone image and at pixel (m,n) generating an error map.~~

15. (Currently Amended) The method according to Claim 14 Claim 12 for reducing boundary effects ~~for in~~ images, further comprising:

adjusting pixels in the said pixels in said boundary regions to reduce a magnitude of errors ~~stored in the error map that correspond to the pixels.~~

16. (Currently Amended) A method for reducing boundary effects in for-images with mixed screen patterns, comprising: the steps of:

means for halftoning an image an original contone image, resulting in a halftone image with a plurality of halftone portions;  
means for adjusting a boundary region located between the halftone portions of the halftone image of said image to minimize a brightness deviation between the boundary regions and the original contone image; of said halftone from an original contone;

means for performing a low-pass filtering in of halftones in said the boundary regions, a boundary region having a width that is one or more pixels wide; which have one or more than one pixels wide along a boundary; and

means for choosing a cutoff frequency for the low-pass filtering.

17. (Currently Amended) The method according to Claim 16 for reducing boundary effects in for-images, wherein low-pass filtering further comprises: the steps of:

means for choosing a cutoff frequency for said the low-pass filtering that is substantially the halftone frequency. to be around halftone frequency

18. (Currently Amended) The method according to Claim 16 for reducing boundary effects in for-images, wherein adjustment further comprises: the steps of:

means for comparing a filtered portion of the halftone image to a corresponding portion of the original contone image said filtering result to said original contone image and generating an error map.

19. (Currently Amended) The method according to Claim 16 for reducing boundary effects in for-images, wherein adjustment further comprises: the steps of:  
means for comparing a filtered portion of the halftone image to a corresponding portion of the original contone image and generating an error map that includes an error at a pixel (m,n). ~~said filtering result to said original contone image and at pixel (m,n) generating an error map.~~

20. (Currently Amended) The method according to Claim 19 ~~Claim 16~~ for reducing boundary effects in for-images, further comprising:

means for adjusting pixels in the boundary regions ~~said pixels in said boundary regions~~ to reduce a magnitude of errors stored in the error map that correspond to the pixels.